NAVSEA 04L5 CONFIGURATION MANAGEMENT and READINESS DIVISION

ERP CM Strategy
CDM/ISEA Conferenc
04/2/02

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TOPICS

**SEA 04L5
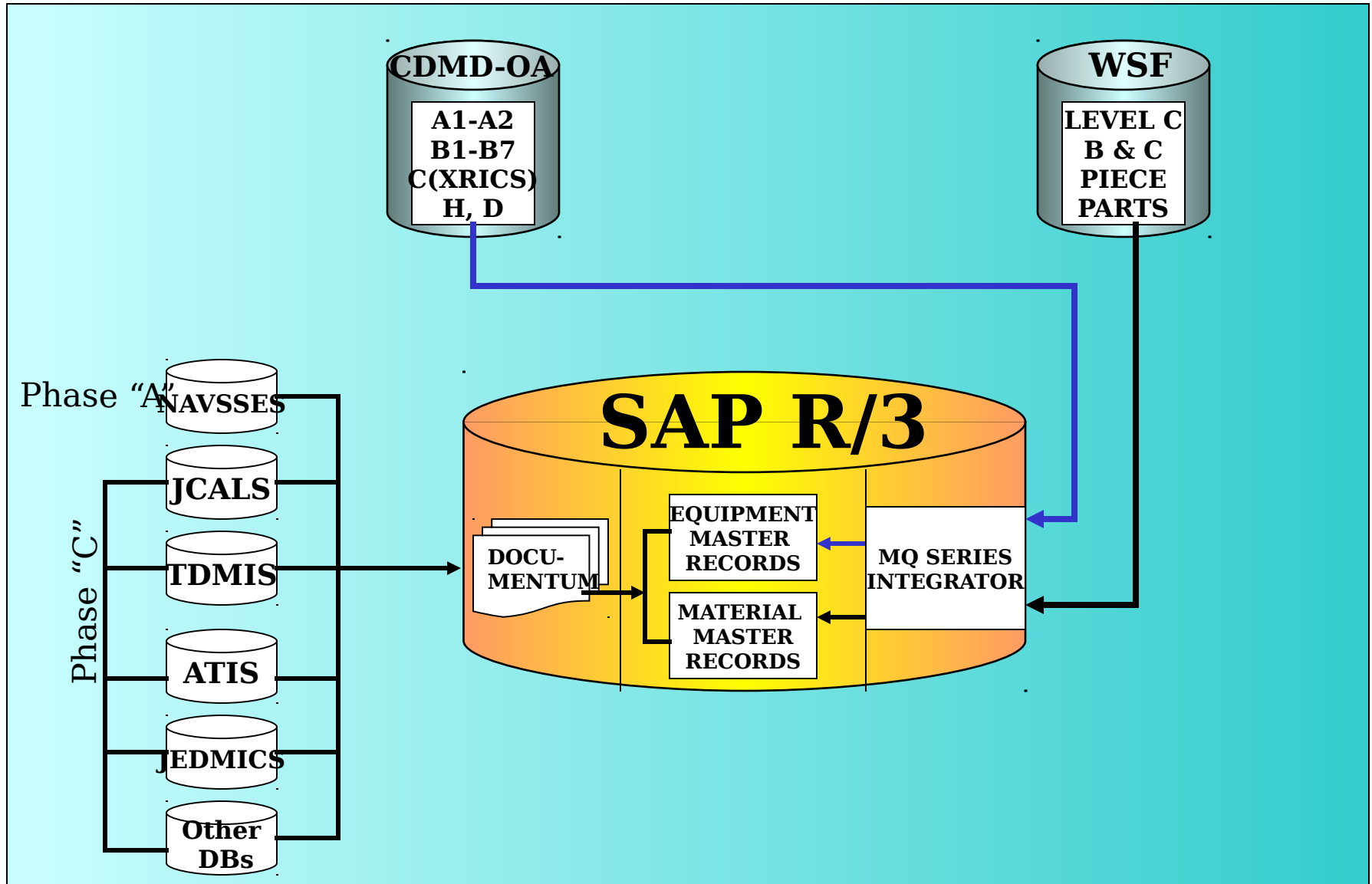CONFIGURATION
MANAGEMENT
and
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DIVISION**

CM ERP STATUS

Phase A Highlights
Phase A Initial Data Load (E52)
Phase A Change Updates (ASI)
NEMAIS Data Purification
Initial Desktop Audit Results
Phase C Transition of CM into ERP
CM ERP Preparation Plan
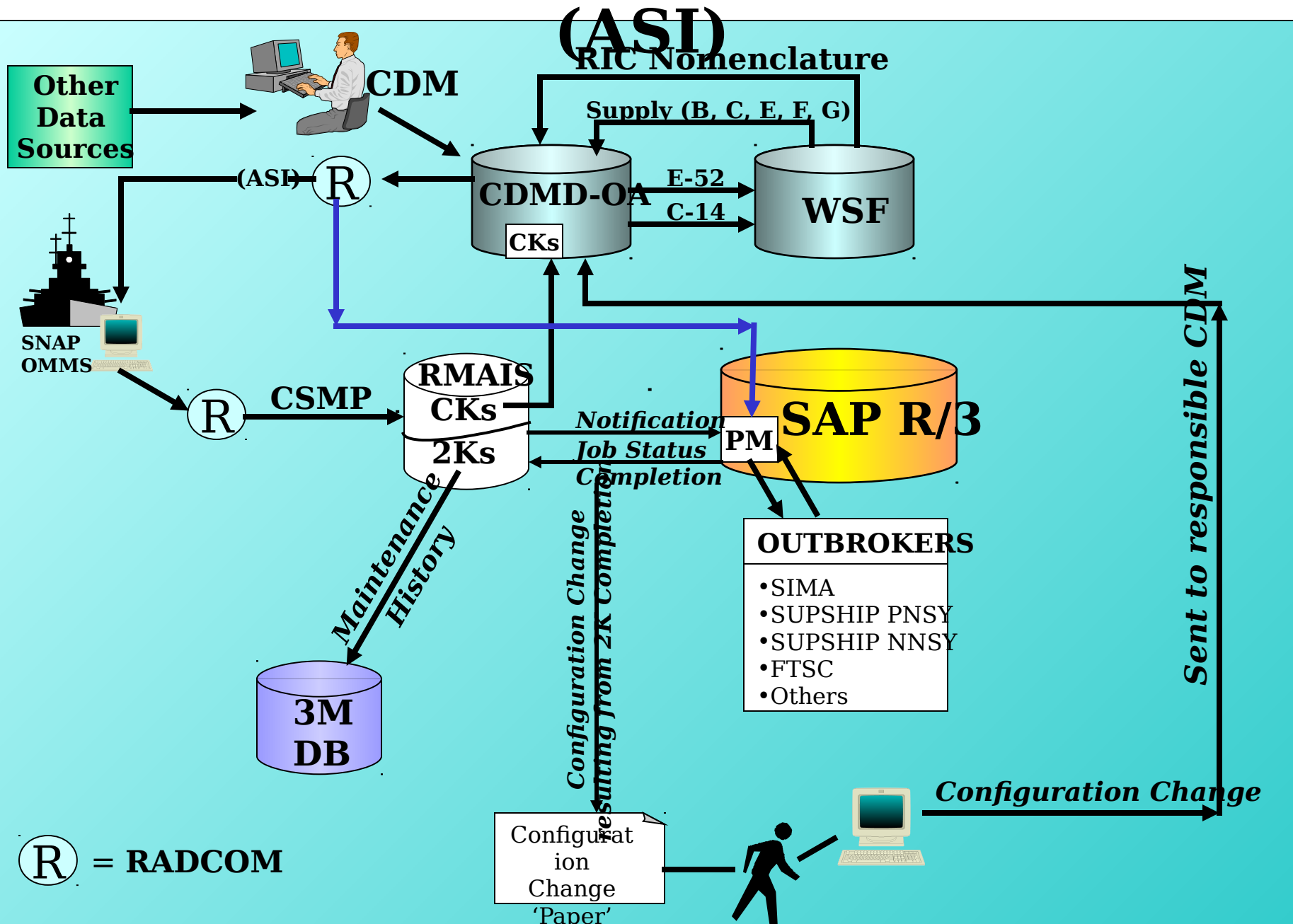Key Challenges
CM ERP POA&M
Summary

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PHASE A HIGHLIGHTS

- Limit initial data migration to 22 critical data elements
- CDMD-OA E52 process to initialize SAP R/3
  - *Tailored ASI process to update Baseline Configuration after load*
- Focus on configuration <u>data</u> <u>quality</u> and <u>accuracy</u>
  - *Desk-Top Audits of Critical Data Elements*
- CM subject matter experts part of NEMAIS on-site Team
  - *Designed CDMD-OA Interface Specification*
  - *IMG Configuration; Unit, Integration and End User Testing*
- Participate in ERP Interoperability Workshops
  - *Focus on Common Touch Points Between ERP Pilots and CCB Process*

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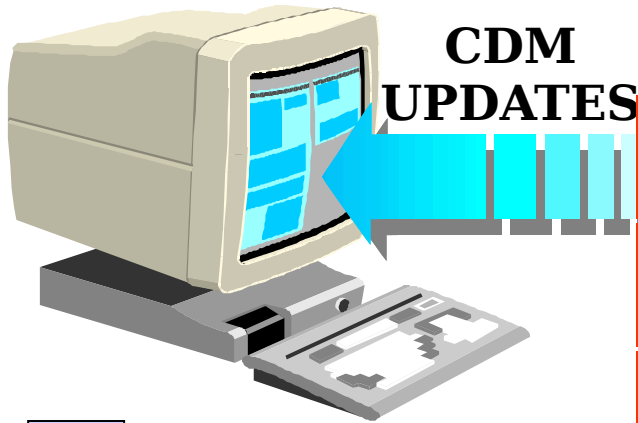# PHASE A INITIAL DATA LOAD (CDMD-OA E-52)

PHASE A CHANGE UPDATES (ASI)

RIC Nomenclature

Other Data Sources

CDM

Supply (B, C, E, F, G)

(ASI) R

CDMD-OA

E-52

C-14

WSF

CKs

SNAP OMMS

R CSMP

RMAIS CKs

2Ks

Notification

Job Status Completion

PM SAP R/3

OUTBROKERS
- SIMA
- SUPSHIP PNSY
- SUPSHIP NNSY
- FTSC
- Others

Maintenance History

Configuration Change resulting from 2K Completion

Sent to responsible CDM

3M DB

Configuration Change 'Paper'

Configuration Change

R = RADCOM

CM ERP DATA PURIFICATION APPROACH
PHASE A

- Specific data purification efforts include:

EFFORT	DESCRIPTION
Review mandatory/warning edits in CDMD-OA	Resolve mandatory edits for RT2, RT3, RT4, CFF, and X-RIC records that prevent ASI, C14, or E52 program from processing record.
CDMD-OA Desktop Audits	CDMs checking12 of 22 elements using CDMD-OA management queries. (Other elements require ISEA review and physical validation.)
HSC	Identify and correctly relate subordinate equipments to the superior equipments
Alteration Data Cleansing	ALT RIC Nomenclature against Equipment Identification Number (EIN)
ESWBS Application	Checking ESWBS Nomenclature for correct ship application (e.g., equipment supporting Shaft 3 is listed for a ship that has only two shafts).
Master ESWBS Table	Develop master ESWBS cross reference table for SAP.
WCRE	Ensure Work Center field is not blank.
DECOM Ships	Remove records for DECOM ships prior to migration to prevent establishment of False Plant and Functional Locations
Validation Comparison	Compare Configuration Data in CDMD-OA to results of existing Validation Efforts
Maint/Parts usage comparison	Compare maintenance/parts usage against configuration data in CDMD-OA

CDM Desktop Audit Data Clean Up

CDM UPDATES

CORE DATA ELEMENTS REVIEWED

PAR RIC	HSC	LOC	ALT TYPE	ALT ID	ALT STAT
EIN	PRID	WCRE	EIC	ESWBS	RIC
SAC/ NOM	EFD	EIC/ NOM	ALT RIC	SAC	APL/ NOM
MCC	DISC	WARN ERROR	PAR RIN	LSSC	MAND ERROR
ALT TYPE2	RIN	CEI	S/N	PAR S/N	ISC	QTY/ APP

=Core Desktop Audit Guide

=Other Core Elements

=3% errors
=2% errors
=1% errors

- **Desktop audit approximately 75% complete**
- **112.3M records reviewed to date/8.3K errors identified and corrected (<1% of total)**
- **Audit results reflect some subjective interpretation of data due to variance in CDM approach to track requested metrics.**

PHASE C
TRANSITION OF CM INTO ERP

Address Phase A findings and known systemic problems

- Lack of Standardization
  - Multiple HSC Schemas
  - Nomenclature inconsistencies
  - UNNPI Definition
  - SAP R/3 Functionality Gaps
- Develop Comprehensive Implementation Plan for Phase C
  - Preparation Plan (High Level Requirements)
  - Transition Plan (Detail Design)
  - Application Plan (Execution)

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ERP CM
PHASE "C" PREPARATION PLAN

ERP CM Enterprise Objectives

ERP CM Strategic Business Plan

Core CM Business Processes

Business Programs

| USERS |
| CUSTOMERS |
| DATA SOURCES |
| MAIN-TAINERS |
| LEGACY DATA FEEDS |

ADMINISTRATIVE HIERARCHY	PHYSICAL HIERARCHY	STANDARD-IZATION	CHANGES REVISIONS	DATA QUALITY	METRICS

ENTERPRISE OPERATING STANDARDS

ADMINISTRATIVE HIERARCHY	PHYSICAL HIERARCHY	STANDARD-IZATION	CHANGES REVISIONS	DATA QUALITY	METRICS
Cross Functional Business MGMT Teams	Cross Functional Development Teams	Numbering Conventions Items/Documents	Closed-Loop Change Process	Cross Functional Validation/Audit Team	Macro / Micro Level Measurements
As Planned, As Released Baseline	Metadata for Items and Documents	Rules of Inter - Changeability	Standardized Engineering Change Forms	Source Data / Document Ownership	Adherence to Operating Standards
Organizational Policies	Data Repositories and Security	Nomenclature/ Description Consistency	Technical Reviews/ Control Boards	Accountability for Data Integrity	Ongoing Surveillance Internal Audits
CM Business Rules	CM During Development/ Research	Equivalent/ Alternate Items Cross-Reference	Effective Dates/ Reidentification Process	Error Prevention For Data Entry Integrity = 100%	Benefits Of Real Improvement

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ERP CM PHASE C
KEY CHALLENGES

- Funding
- Expanded data clean-up efforts for Phase C
- Roles & Responsibilities
- Licenses
- Training
- Functionality Gaps in SAP R/3
- Design of ASI/RAD-like capability
- Existing shipbuilding & systems contracts
- Standardization (HSC, Nomenclatures, etc.)
- Configuration data synchronization with legacy databases
- Interoperability across ERP Pilots and SAP R/3 modules
- SAP R/3 software Configuration Control/Formal CCB Process

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CM ERP IMPLEMENTATION POA&M

PHASE		FY 02				FY 03		FY 04			
	1	2	3	4	2	3	14	2	3	14
PREPARATION PHASE -Develop Preparation Plan		▶									
TRANSITION PHASE -Develop Transition Plan - Business Process Re-eng - Perform Gap Analysis - Conduct Testing			▶								
APPLICATION PHASE -Evaluate Return on Invest - Proof of Concept, ship prototype for ASI-like process						▶				
SUNSET CDMD-OA PHASE										▶
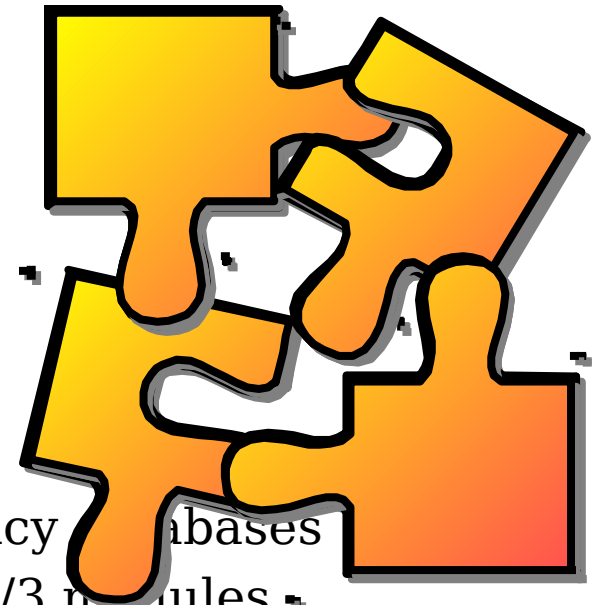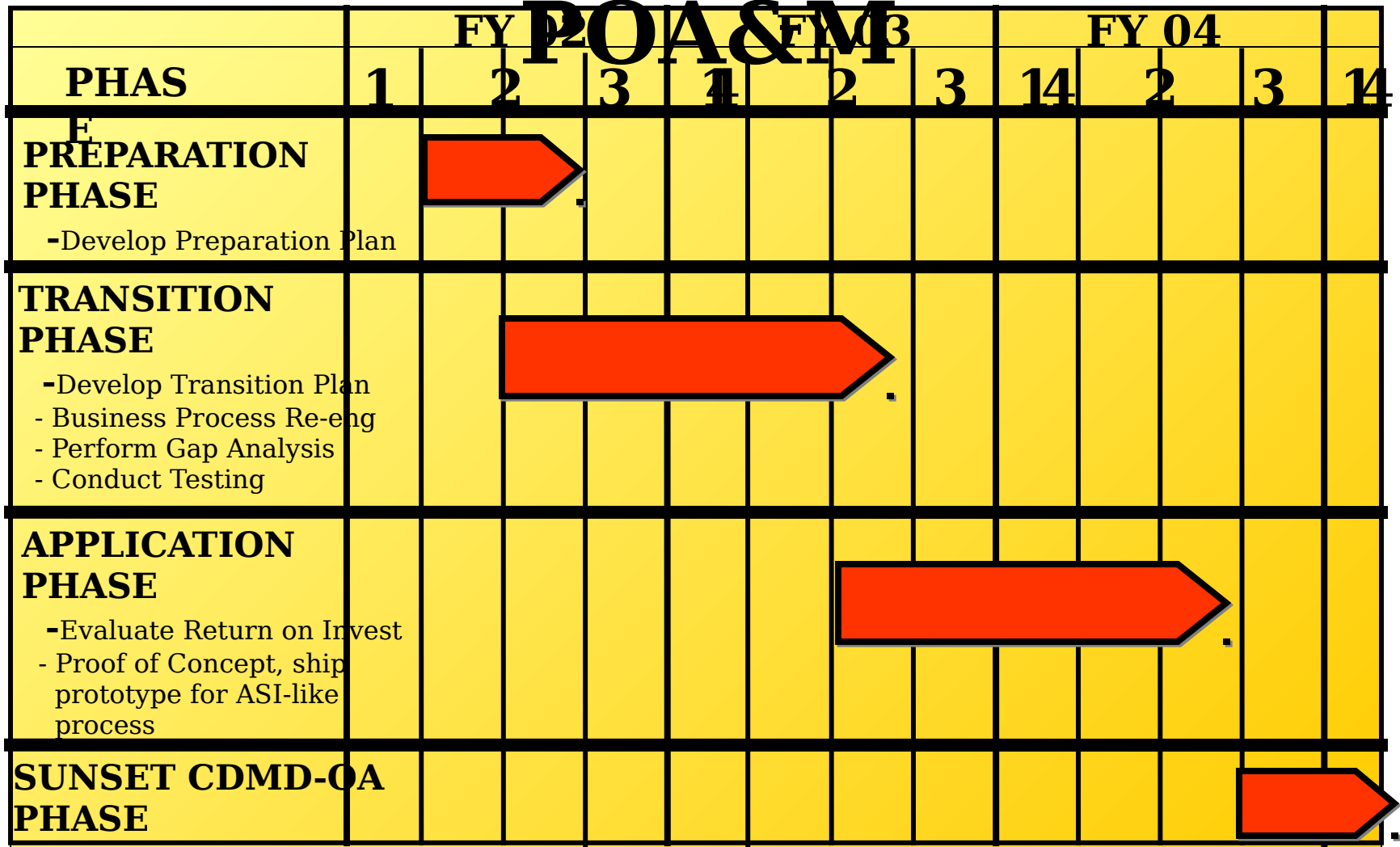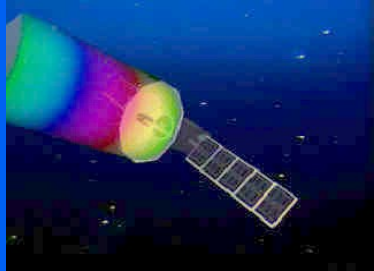
SUMMARY

- Continue to support NEMAIS Phase A implementation while transitioning into Phase C.

- Successful migration of CM business processes and data into ERP dependent upon overcoming key challenges.

Bottom Line: Seize this opportunity to improve our CM Product to the Fleet

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